

ABSTRACT OF THE DISCLOSURE

The invention provides a rod integrator or the like having high efficiency for light utilization and suitable for a color-recapture system. The present invention can include a rod integrator having a reflective inner circumference (reflecting surface) for emitting light incident on an incident-end opening from a light source through an emerging-end opening. An end face on the outer periphery of the emerging-end opening can be a scattering surface for reflecting the incident light on the end face toward the optical axis that agrees with the central axis of the rod integrator.